

CLAIMS:

Sub 1. A shelving rack comprising:

a frame structure including two generally vertical rear legs and two generally vertical front legs with the front legs arranged at a front of the rack and spaced by a width of the rack and the rear legs arranged at the rear of the rack and spaced by the width of the rack, the front legs being spaced from the rear legs by a depth of the rack;

a plurality of shelves arranged one above the next with a width substantially equal to the width of the rack and a depth between a front edge and a rear edge substantially equal to but greater than the depth of the rack;

each shelf being supported at the front edge so the weight from the front edge is carried by the front legs;

each shelf being inclined upwardly and rearwardly from the front edge toward the rear edge which is elevated;

each shelf having an element thereof at the rear edge in engagement with a front face of a respective one of the rear legs;

each front leg being connected to the respective rear leg such that the space therebetween is maintained fixed in response to pressure from the shelves tending to increase the space;

each shelf being substantially rigid between the front edge and the rear edge such that the shelf remains straight between the element and the front edge and supports the weight of the articles therebetween without bending;

each shelf being substantially rigid across the rear edge such that the shelf remains straight between the elements supports the weight of the articles therebetween without bending;

5 such that each shelf is supported in inclined position solely by its support at the front edge and its engagement with the rear legs holding the rear edge in elevated position against downward movement.

2. The shelving rack according to Claim 1 wherein the angle of inclination is sufficient that the articles on the shelf slide forwardly to the front edge.

10 3. The shelving rack according to Claim 1 wherein the shelves are formed of wire

4. The shelving rack according to Claim 1 wherein there is provided a rear stiffener member extending across the shelf adjacent the rear edge.

15 5. The shelving rack according to claim 4 wherein the rear stiffener member includes a flat surface arranged at an angle on the shelf to lie in a common plane with the front face of the rear leg.

6. The shelving rack according to Claim 4 wherein the rear stiffener member is a flat bar.

7. The shelving rack according to Claim 4 wherein the rear stiffener member is V-shape.

20 8. The shelving rack according to Claim 4 wherein the elements of the shelf engaging the rear legs are formed as parts of the stiffener member.

cont. 24

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

a transverse support rail at the front edge to a stiffener member of the shelf at the rear edge.

17. The shelving rack according to Claim 1 wherein the front edge of the shelf includes a wire which is connected at its ends to respective one of the front legs so as to hold the front legs together.

18. A shelving rack comprising:

a frame structure including two generally vertical rear legs and two generally vertical front legs with the front legs arranged at a front of the rack and spaced by a width of the rack and the rear legs arranged at the rear of the rack and spaced by the width of the rack, the front legs being spaced from the rear legs by a depth of the rack;

a plurality of shelves arranged one above the next with a width substantially equal to the width of the rack and a depth between a front edge and a rear edge substantially equal to but greater than the depth of the rack;

each shelf being supported at the front edge so the weight from the front edge is carried by the front legs;

each shelf being inclined upwardly and rearwardly from the front edge toward the rear edge which is elevated;

wherein each shelf has a plastics sheet member thereon defining a low friction surface to allow the articles to slide.

19. The shelving rack according to Claim 18 wherein the sheet member has an upturned front edge to prevent the articles from sliding off the inclined shelf over the front edge.

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each of the front support beam and the rear support beam including a support receptacle for the respective edge of the shelf;

the shelf having at the rear edge a downwardly turned rear edge portion extending downwardly from the shelf plane to the rear receptacle.

21. The shelving rack according to Claim 20 wherein the shelf includes a plurality of longitudinally spaced stiffener members each extending from the front edge to the downwardly turned rear edge portion.

22. The shelving rack according to Claim 20 wherein each stiffened member is of reduced height at the front to engage into the receptacle of the front support beam.

23. The shelving rack according to Claim 20 wherein each shelf is formed from wire mesh.

24. The shelving rack according to Claim 20 wherein each shelf has a plastics sheet member thereon defining a low friction surface to allow the articles to slide.

25. The shelving rack according to Claim 24 wherein the sheet member has an upturned front edge to prevent the articles from sliding off the inclined shelf over the front edge.

26. The shelving rack according to Claim 20 wherein the rear support beam is located at a height above the front support beam.

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